

ABSTRACT

In a planarization process with a CMP method for a work surface having very small protrusions and depressions thereon at a semiconductor process, a polishing method is provided which achieves high flatness by selectively polishing and removing the protrusions. Relating to the planarization process, such as a CMP processing or an aspheric lens polishing process, the polishing method is performed by forming an aggregation trace of particles on the work surface by irradiating laser light. More specifically, a region where the laser light to be irradiated is the depressions adjacent to the protrusions, and the irradiated laser light forms the aggregation trace of particles within the depression, thereby controlling the amount of removal material at a fine region to allow selective polishing of the protrusions.